Original article:

Study of outcome of labour and mode of delivery in a post caesarean pregnancy in urban population

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Abstract:

Introduction : In today's situation when concern over the rising caesarean section rates all over the world, despite the Healthy People 2010 National goal to reduce the caesarean delivery rates to 15 percent of births. With this background present work was planned to Study of outcome of labour and mode of delivery in a post caesarean pregnancy in urban population.

Methodology: The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

Results: Above table shows that out of 80 cases that underwent emergency repeat LSCS 79 underwent repeat emergency LSCS with transverse incision and in one case scar rupture was seen & repair was done. No case of caesarean hysterectomy was there in the present study.

Conclusion: There is no doubt that a trial of labour for VBAC is relatively a safe procedure but still it continues to be a challenging issue as its management is not totally risk free.

Keywords : Labour , caesarean section

Introduction

In today's situation when concern over the rising caesarean section rates all over the world, despite the Healthy People 2010 National goal to reduce the caesarean delivery rates to 15 percent of births. Each year, this century has set record rates of caesarean deliveries. Caesarean section is considered by many as the most significant intervention in childbirth. If the cost of a caesarean section is significant factor then, the cost of not doing one at the right time and in the right place is also equally significant. [1] The justification of a caesarean section is difficult to prove, not only in economic terms, but also in terms of maternal satisfaction and fetal and maternal morbidity and mortality. Vaginal route of delivery is the natural way of giving birth to a child, however the development of surgical procedures, abdominal route by the way of caesarean section was devised and it became a safe way of delivery of fetus in selected cases.[2] With this background present work was planned to Study of outcome of labour and mode of delivery in a post caesarean pregnancy in urban population

Methodology:

The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

The study was a cross sectional study conducted among 100 women admitted in the labour room in the Department of obstetrics & gynecology of Sri Siddhartha Medical College & Research Centre, Tumkur, as per fulfilling

the inclusion and the exclusion criteria's as mentioned below.

Simple size: 100 cases

Type of study: Cross sectional study

Duration of study: $1^{1/2}$ year.

Inclusion criteria:

All term pregnant women with previous history of single uncomplicated lower segment caesarean section done for non recurrent indications with spontaneous onset of labour.

Exclusion criteria:

1. Women with any previous uterine scar due to myomectomy, hysterotomy operation and previous classical caesarean section , or scar due to previous rupture uterus repair.
2. Women with preterm premature rupture of membrane (PPROM).
3. Women with sepsis or chorioamnionitis
4. Women with intrauterine deaths.
5. Women with previous two or more lower segment caesarean section.
6. Women with induced labour.
7. Women with multiple pregnancies.
8. The cases in which informed and written consent are not obtained for this study.

Major outcome: To determine the number of cases undergoing repeat caesarean section or trial of scar for vaginal birth after caesarean section. Also, to see for the outcome of labour in both the mode of deliveries.

The patients with a history of prior one LSCS was followed among booked cases:

The high risk pregnant women were advised regular antenatal check up after confirmation of pregnancy and were advised to opt only for institutional delivery.

Results and observations :

Present study includes 100 cases. A period of one and half years of study was undertaken. Their outcome of labor in post caesarean pregnancy was analyzed.

Table 1) Showing type of delivery outcome with relation to booking status in the present study:

Booked or Unbooked case	**Cases went for EmRCS**	**Cases went for VBAC**	**Total**
Booked Cases	47	11	58
UnBooked Cases	33	09	42
Total	80	20	100

Above table shows that there was statistically significant difference (p value: 0.001) between booking status of the cases and mode of labour outcome. As the maximum source of cases were mostly referred one from peripheral PHCs , CHCs, clinics etc to our hospital .

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TABLE NO 2 : Showing outcome of repeat emergency LSCS in present study:

Type of present LSCS:	Frequency	Percentage%
LSCS (Transverse)	79	98.75
LSCS with repair of uterine rupture scar	1	1.25
Caesarean section with hysterectomy	0	0
Total	80	100

Above table shows that out of 80 cases that underwent emergency repeat LSCS 79 underwent repeat emergency LSCS with transverse incision and in one case scar rupture was seen & repair was done. No case of caesarean hysterectomy was there in the present study.

TABLE 3 : Showing result of trial of labour after caesarean section (TOLAC) in present study:

Outcome of trial of labour:	No of cases	Percentages %
Successful TOLAC (VBAC)	20	57.14
Unsuccessful TOLAC (VBAC)	15	42.86
Total	35	100

As shown in the above table success rate of TOLAC in present study was 57.14 %.

Discussion:

In the present study we have compared and evaluated various indications of emergency repeat caesarean section (EmRCS) as well as various parameters associated with mode of delivery in cases of previous one caesarean section handled in our hospital and cases those were referred to us for management.

Pregnant women with a prior section may be offered either a trial for VBAC or an elective or emergency repeat caesarean section.The proportion of women, that decline trial for VBAC, is in turn, a significant determinant of overall rising rates of caesarean birth in all over world.New evidence is emerging to indicate that VBAC may not be as safe as originally thought. [3,4] But reports are conflicting and these factors along with medico legal concerns have led to a decline in clinicians offering and women accepting trial for VBAC in various parts of the world. [5,6]

In present study which was conducted in one of the tertiary referral centre of Tumkur, 100 cases of previous one caesarean section were studied, 52 % cases were booked at antenatal clinic and 48 % cases were un booked in our hospital. Out of 2430 patients who delivered in our hospital during the present study period of one and half years, 80 term patients had a history of a prior one LSCS, accounting for

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5.17 % of the total number of patientsThis incidence is comparable to the recent study by *Gonen* and colleagues, in which 5.8% of the total number of patients who delivered had a history of prior caesarean delivery.*Sagar* and associates, in 1983, reported an incidence of 4.53%[7] *Flamm* and colleagues reported an incidence of 8.6% and *Pickhardt* reported an incidence of 11.7%. [8,9] The overall rate of vaginal delivery following previous caesarean delivery, as reported in literature, varies from 28% to 51%. *Landon et al* reported an incidence of 28.57% vaginal deliveries.[8]

Our study is comparable to this study, with 20% of the patients delivering vaginally. However, *Gonen* and colleagues in their study reported 51.22% of patients delivering vaginally. *Chattopadhyay* and colleagues reported an incidence of 40% and *Pickhardt* reported an incidence of 42%. [10.11]

Conclusion:

There is no doubt that a trial of labour for VBAC is relatively a safe procedure but still it continues to be a challenging issue as its management is not totally risk free.

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